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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/628,203	07/28/2003	Jurgis Astrauskas	1007-0565	6105
7590	07/25/2006		EXAMINER	
Maginot, Moore & Beck, LLP Chase Tower, Suite 3250 111 Monument Circle Indianapolis, IN 46204-5109			TRAN, DZUNG D	
			ART UNIT	PAPER NUMBER
			2613	

DATE MAILED: 07/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/628,203	ASTRAUSKAS, JURGIS	
	Examiner Dzung D. Tran	Art Unit 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 28 July 2003.  
 2a) This action is FINAL.                    2b) This action is non-final.  
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
 5) Claim(s) \_\_\_\_\_ is/are allowed.  
 6) Claim(s) 1-20 is/are rejected.  
 7) Claim(s) \_\_\_\_\_ is/are objected to.  
 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.  
 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) All    b) Some \* c) None of:  
     1. Certified copies of the priority documents have been received.  
     2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
     3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
|   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Specification***

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al. U.S. Patent no. 5,933,812 in view of Lys et al. US publication no. 2004/0257007.

Regarding claims 1 and 8, Meyer discloses a method/apparatus for optical communication with a device external to the probe, the probe comprising:

an optical receiver Q1 for receiving a light signal from an external device and generating a corresponding data signal (col. 17, lines 21-22); and a voltage converter (e.g., RS-232, col. 29, lines 9-11).

Meyer does not specifically disclose the RS-232 for converting a first voltage signal from a diagnostic tool coupled to the optical receiver to a second voltage signal. However, it is well recognized in the art that in RS-232, a logical one (1) is transmitted by putting between +6 and +12 volts on the line, and a logical zero (0) is transmitted by putting between -6 and -12 volts on the line as disclosed in page 1, paragraph 0007 of Lys. Thus, if it is not inherently, it would have been obvious to an ordinary skill in the art

that the RS-232 is converted the voltage signal from the diagnostic tool to the second voltage at +6 and +12 volts for logical one (1) or -6 and -12 volts for logical zero (0).

Regarding claims 2 and 9, Meyer discloses wherein the first voltage signal is received from a power supply RXDVCC of the diagnostic tool and the voltage converter is an RS-232 voltage converter (col. 29, lines 9-11).

Regarding claims 3 and 10, Meyer discloses the first voltage signal is comprised of a +5V reference and a ground reference (col. 20, lines 36-37) and the voltage converter generates a -12V reference from the first voltage signal (e.g., Meyer discloses the RxD input of phototransistor Q1 will see a logical (0), see col. 17, lines 28-30, thus it is inherently that RS-232 voltage converter generates a -12V reference from the first voltage signal).

Regarding claims 4 and 11, Meyer discloses in Figure 17A, the optical receiver further comprising:

a phototransistor Q1;  
an amplifier U14D coupled to the phototransistor; and  
the second voltage signal (e.g., from RS-232 voltage converter; col. 29, lines 9-11) being coupled to the amplifier to operate the amplifier in a high speed mode.

Regarding claims 5-7 and 12-14, Meyer discloses the second voltage signal is a negative potential reference signal (e.g., Meyer discloses the RxD input of phototransistor Q1 will see a logical (0), see col. 17, lines 28-30, thus it is inherently that RS-232 voltage converter generates a -12V reference from the first voltage signal).

Regarding claim 15, Meyer discloses in Figure 1, a diagnostic system that communicates with an appliance through a low intensity optical interface comprising:

- a diagnostic tool (e.g., host computer 30, 60) including a communication interface; and
- a communication probe including a voltage converter (RS-232 voltage converter; col. 29, lines 9-11) coupled to the communication interface of the diagnostic tool through an electrical cable, the voltage converter for converting a first voltage signal to a second voltage signal, the communication probe also including an optical receiver Q1 of Figure 17A coupled to the voltage converter so that the second voltage signal operates the optical receiver in a high speed mode.

Regarding claims 16 and 17, Meyer discloses in Figure 1, the diagnostic tool is a handheld computer and a personal digital assistant 60.

Regarding claim 18, Meyer discloses wherein the communication interface is coupled to the power supply of the diagnostic tool (col. 12, lines 22-23).

Regarding claim 19, Meyer discloses the second voltage signal is a negative potential reference signal (e.g., Meyer discloses the RxD input of phototransistor Q1 will see a logical (0), see col. 17, lines 28-30, thus it is inherently that RS-232 voltage converter generates a -12V reference from the first voltage signal).

Regarding claim 20, Meyer discloses the optical receiver further comprising:

- a phototransistor Q1;
- an amplifier U14D coupled to the phototransistor; and

the second voltage signal (e.g., from RS-232 voltage converter; col. 29, lines 9-11) being coupled to the amplifier to operate the amplifier in a high speed mode.

### ***Conclusion***

3. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
  - a. Momot et al. U.S. Patent no. 4,806,958. Cassette/machine optically coupled interface
  - b. Baker et al. U.S. Patent no. 7,019,492. Hand-held manually operated battery charger with emergency light
  - c. Pavelchek U.S. Publication no. 2005/0276608. Establishment and maintenance of optical link between optical transceiver nodes in free space optical communication networks
4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dzung D Tran whose telephone number is (571) 272-3025. The examiner can normally be reached on 9:00 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Dzung Tran*

Dzung Tran  
07/18/2006